

Listing of the Claims:

The following listing of claims will replace all prior versions and listings of claims in the application.

1-37. (Canceled)

38. (Previously Presented) A hyperimmune serum-reactive antigen comprising an amino acid sequence from any of SEQ ID NOs: 179-356 or fragments thereof.

39. (Previously Presented) The hyperimmune serum-reactive antigen or fragment of claim 38, further defined as a peptide comprising an amino acid sequence described in the "predicted immunogenic aa" and/or "location of identified immunogenic region" of Table 1 or of a serum reactive epitope of Table 3.

40. (Previously Presented) The hyperimmune serum reactive antigen or fragment of claim 38, further defined as comprising an amino acid sequence of amino acids: 63-91, 95-101, 110-116, 134-148, 150-156, 158-164, 188-193, 197-209, 226-241, 247-254, 291-297, 312-319, 338-346, 351-358, 366-378, 404-410, 420-438, 448-454, 465-473, 482-488, 490-498, 503-510, 512-519, 531-543, 547-554, 568-575, 589-604, 610-631 and 239-308 of SEQ ID NO:179; 16-29, 35-47, 50-68, 70-79, 91-101, 143-149, 158-163, 185-191, 196-206, 215-224, 230-237, 244-251, 258-278, 290-311, 319-325, 338-351, 365-385, 396-429, 445-454, 458-466, 491-499, 501-521, 17-79 and 218-233 of SEQ ID NO:180; 4-10, 16-41, 46-66, 77-84, 91-97, 102-118, 125-144, 187-200, 202-214, 245-253, 255-261, 286-295, 300-330, 335-342, 350-361, 363-381, 385-392, 396-416, 435-450 and 460-470 of SEQ ID NO:181; 11-19, 27-48, 52-59, 77-82, 84-107, 118-125, 127-154, 178-183, 192-209, 215-221, 286-295, 302-313, 350-357, 402-415, 417-431, 453-463, 465-493 and 313-331 of SEQ ID NO:182; 19-26, 30-43, 47-55, 63-68, 72-80, 97-104, 107-119, 129-146, 160-175, 194-216, 231-251, 254-260 and 26-43 of SEQ ID NO:183; 7-13, 29-37, 65-81, 110-120, 123-131, 135-152, 230-249, 254-260, 284-290, 292-299, 317-326, 329-336, 403-444, 452-458, 466-477, 490-498, 510-519, 541-550, 557-566 and 533-567 of SEQ ID NO:184; 5-47, 71-77, 79-86, 89-95, 120-126, 137-144, 176-181, 184-196, 202-208, 211-232, 236-282, 301-313, 317-325, 341-347, 353-384, 394-400, 412-433, 436-443 and 59-75 of SEQ ID NO:185; 4-18, 22-38, 59-69, 106-112, 116-130, 138-149, 156-170, 175-197, 200-214, 216-223, 233-244, 255-261, 266-276, 279-286, 325-333, 342-348, 366-399, 402-420, 429-441, 1-104 and

130-147 of SEQ ID NO:186; 50-58, 69-95, 97-113, 131-136, 157-163, 170-175, 188-212, 220-226, 254-259, 265-277, 283-289, 297-308, 311-318, 347-358, 360-369, 378-401, 416-421, 440-450, 454-462, 470-476, 493-502, 506-514, 536-567, 585-590, 598-607, 613-618, 653-659 and 35-46 of SEQ ID NO:187; 16-29, 32-60, 65-87, 89-123, 128-134, 137-158, 162-173, 178-196, 210-216, 218-228 and 206-225 of SEQ ID NO:188; 10-20, 26-35, 51-64, 86-91, 94-100, 113-122, 154-160, 185-191, 193-201, 211-217, 225-230, 237-246, 251-257, 298-304, 306-312, 316-328, 340-348, 357-389, 391-397, 415-421, 449-456, 458-471, 488-495, 502-511, 24-55 and 236-341 of SEQ ID NO:189; 5-22, 41-51, 87-93, 114-122, 127-136, 150-156, 158-166, 223-233, 245-263, 291-296, 9-126 and 127-285 of SEQ ID NO:190; 30-43, 46-56, 61-70, 72-83, 85-93, 103-113, 119-125, 151-166, 179-191, 212-218, 225-231, 236-243, 262-267, 291-307, 331-344, 349-355, 366-372, 380-386, 414-422, 428-447, 459-464, 469-478, 507-519, 525-544, 563-569, 576-590, 620-626, 633-643, 654-659, 665-671, 684-707, 717-723, 725-733, 747-779, 782-801 and 347-361 of SEQ ID NO:191; 4-12, 14-26, 37-80, 107-115, 133-139, 144-150, 154-165, 173-180, 191-199, 205-211, 221-231, 237-244, 254-284, 307-340, 342-353, 360-368, 370-380, 479-493, 495-503, 509-522, 525-536, 539-547, 554-560, 565-573, 578-583, 7-23 and 465-479 of SEQ ID NO:192; 4-17, 47-55, 76-83, 85-100, 104-112, 117-123, 126-135, 142-148, 156-167, 174-182, 267-273 and 258-283 of SEQ ID NO:193; 8-32, 36-42, 65-88, 102-108, 112-140, 147-163, 170-179, 183-193 and 117-124 of SEQ ID NO:194; 12-18, 45-50, 62-77, 82-95, 99-113, 115-123, 125-147, 155-177, 187-209, 211-223, 244-253, 259-270, 278-297, 302-307, 311-318, 329-334, 350-356, 359-365, 390-400, 402-413 and 333-350 of SEQ ID NO:195; 4-13, 15-27, 30-46, 53-58, 68-74, 82-95, 115-126, 134-139, 148-153, 159-176, 182-199, 201-217, 220-225, 227-235, 237-248, 253-266, 300-315, 322-336, 390-396, 412-426, 438-445, 448-459, 477-484, 502-508, 515-527, 529-537, 553-568, 643-651, 658-667, 690-703 and 376-400 of SEQ ID NO:196; 4-10, 24-32, 38-55, 59-67, 70-77, 80-87, 89-97, 123-129, 134-151, 166-172, 178-189, 191-216, 218-235, 245-259, 271-315, 326-339, 341-360 and 73-94 of SEQ ID NO:197; 13-25, 31-38, 43-57, 79-85, 92-99, 106-112, 117-128, 130-139, 146-158, 160-175, 194-204, 211-222, 225-232, 234-242, 263-270, 278-292, 299-320, 322-333 and 240-256 of SEQ ID NO:198; 4-17, 55-63, 66-101, 109-131, 135-143, 145-151, 155-161, 164-170, 177-185, 192-198, 213-218, 223-238, 246-256, 258-268, 273-283, 309-314, 322-328 and 195-221 of SEQ ID NO:199; 13-24, 31-39, 41-50, 63-69, 90-96, 104-109, 116-141, 148-153, 161-167, 173-178, 190-209, 253-258, 265-272, 279-289, 295-312, 317-343, 355-366, 376-389, 400-407, 430-451, 453-464, 466-472, 487-493, 499-505, 523-538, 554-559, 568-579, 584-601 and 344-363 of SEQ ID NO:200; 5-22, 30-36, 53-59,

61-70, 82-92, 99-106, 120-131, 135-148, 154-167, 169-183, 187-199, 204-212, 231-247 and 111-249 of SEQ ID NO:201; 17-36, 40-66, 71-144, 148-171, 173-191, 199-214, 220-252, 265-272, 278-288, 298-333, 342-385 and 287-307 of SEQ ID NO:202; 4-16, 22-28, 30-36, 42-48, 95-116, 154-162, 164-174, 239-252, 258-263, 273-285, 306-313, 323-333, 341-357, 363-369, 372-379, 395-401, 430-436, 438-453, 464-480, 33-44, 233-258 and 349-369 of SEQ ID NO:203; 4-21, 30-37, 46-53, 59-68, 80-92, 98-104, 118-143, 150-160, 165-185, 187-200, 204-211, 224-236, 241-246, 252-258, 271-280, 288-294, 311-320, 335-341 and 191-350 of SEQ ID NO:204; 4-16, 37-59, 64-70, 79-87, 93-102, 107-127, 143-165, 172-188, 197-204, 207-218, 221-227, 242-248, 258-277, 289-296, 298-316, 332-338, 344-365, 367-373, 375-382, 400-408, 415-425, 438-446 and 235-250 of SEQ ID NO:205; 4-37, 39-66, 84-98, 101-127, 140-149, 157-163, 166-172, 175-182, 184-193, 203-208, 215-232, 234-247, 250-299, 303-345 and 183-204 of SEQ ID NO:206; 10-20, 41-61, 73-87, 112-141, 176-192, 194-201, 205-222, 230-237, 257-264, 276-282, 284-310, 312-318, 330-337, 349-357 and 304-328 of SEQ ID NO:207; 4-31, 42-103, 105-113, 121-153, 160-181, 188-196, 210-226, 231-264, 272-287, 297-304, 328-336 and 304-318 of SEQ ID NO:208; 21-43, 46-52, 54-70, 72-79, 94-107, 133-141, 160-166, 217-253, 311-317, 359-365, 374-381, 390-395, 434-440, 488-494, 497-502, 511-522, 554-563, 565-574, 577-585, 591-598, 601-606, 617-625, 633-643, 658-664, 676-682, 694-702, 710-719, 754-760, 782-788, 802-808, 916-921, 942-948, 955-964, 973-979, 992-998, 1006-1011, 1016-1023, 1030-1038, 1046-1053, 1059-1066, 1088-1098, 1119-1126, 1129-1135, 1156-1171, 1173-1181, 1202-1210, 1255-1261, 1268-1280, 1295-1310, 1312-1320, 1375-1381, 1406-1417, 1450-1471, 1478-1492, 1498-1506, 1569-1578, 1603-1608, 1611-1624, 1648-1655, 1663-1670, 1680-1698, 1702-1707, 1713-1719, 1737-1742, 1747-1753, 1762-1769, 1771-1785, 1790-1804, 1811-1818, 1830-1836, 1838-1852, 1874-1886, 1893-1899, 1902-1909, 1942-1948, 1952-1962, 1980-1986, 2001-2017, 2020-2028, 2042-2050, 2052-2068, 2074-2079, 2083-2095, 2107-2113, 2147-2155, 2177-2194, 2203-2211, 2236-2241, 2251-2258, 2267-2274, 2285-2292, 2314-2328, 2330-2340, 2358-2365, 2390-2401, 2408-2418, 2432-2453, 2463-2476, 2486-2507, 2528-2537, 2540-2548, 2552-2558, 2568-2576, 2596-2601, 2610-2622, 2629-2638, 2653-2669, 2718-2727, 2749-2767, 2777-2784, 2789-2795, 2806-2815, 2817-2824, 2835-2843, 2847-2854, 2860-2881, 511-523, 612-630 and 1790-1803 of SEQ ID NO:209; 4-54, 61-68, 72-82, 86-93, 100-108, 115-130, 147-154, 187-194, 196-207, 224-229, 236-251, 275-287 and 96-109 of SEQ ID NO:210; 31-39, 62-69, 91-101, 158-172, 175-180, 186-193, 201-208, 210-223, 243-250, 273-286, 293-299, 319-325, 343-354, 356-365, 368-384, 414-435, 471-491, 512-518, 550-556, 567-581, 584-589, 633-639, 680-692, 697-708, 716-

721, 747-754, 779-786, 810-816 and 366-503 of SEQ ID NO:211; 5-20, 22-48, 57-65, 96-101, 111-122, 130-145, 154-164, 170-181, 193-199, 201-216, 224-241, 244-262, 281-323, 342-351, 359-367, 369-396, 406-416, 424-433, 450-456, 485-491, 493-499, 501-515, 517-535 and 289-305 of SEQ ID NO:212; 4-17, 22-44, 53-60, 66-83, 87-94, 101-106, 110-116, 131-137, 148-183, 189-207, 209-215, 233-242, 251-262, 264-272, 290-296, 308-327, 359-373, 375-380, 397-405, 415-420, 426-433, 444-475, 478-484, 529-536, 548-558 and 106-126 of SEQ ID NO:213; 4-38, 42-50, 58-64, 72-81, 92-118, 140-146, 157-165, 172-192, 198-204, 208-216, 227-234, 238-258, 271-278, 288-293, 311-322, 327-346, 357-370, 375-383, 395-409, 411-417, 425-432, 436-445, 109-129 and 370-380 of SEQ ID NO:214; 23-30, 36-49, 52-64, 86-94, 97-104, 121-129, 257-272, 279-286, 288-294, 307-327, 334-340, 369-375, 377-386, 406-412, 418-423, 430-438, 441-447, 459-465, 469-476, 482-488, 510-546, 550-580, 584-622, 638-645, 653-659, 675-683, 692-705, 723-731, 752-761, 788-795 and 54-72 of SEQ ID NO:215; 11-33, 36-46, 88-104, 116-126, 134-170, 189-195, 199-217, 225-250, 255-261, 266-273, 280-291, 296-313, 334-341, 343-349, 354-360, 362-369, 373-380, 387-401, 406-420 and 259-273 of SEQ ID NO:216; 9-14, 28-44, 57-64, 72-79, 86-93, 104-111, 116-126, 142-150, 159-164 and 61-86 of SEQ ID NO:217; 10-17, 26-33, 43-61, 69-95, 101-107, 109-125, 129-135, 137-144, 147-153, 158-169, 177-187, 209-219, 221-232, 235-247, 261-268, 271-282, 296-302, 306-347, 355-362, 364-379, 386-399, 409-418, 424-442, 451-460, 467-479, 490-498 and 60-74 of SEQ ID NO:218; 8-14, 20-31, 65-84, 94-99, 154-179, 193-207, 238-253 and 96-118 of SEQ ID NO:219; 4-24, 30-44, 47-62, 84-93, 108-116, 124-133, 136-141, 201-209, 217-223, 228-235, 238-245, 247-270, 275-285, 290-314, 328-338, 342-349, 353-365, 375-383, 386-392, 394-402, 417-427, 443-459, 465-481, 492-514, 516-524, 550-566, 602-617, 630-639, 666-676, 687-693, 719-730, 747-753, 783-790, 799-816, 824-831, 837-842 and 167-189 of SEQ ID NO:220; 6-15, 18-28, 58-66, 84-101, 106-129, 136-151, 154-165, 182-203, 205-211, 214-220, 222-228, 233-240, 251-260, 270-277, 284-291, 306-315, 322-328, 363-369, 378-388, 392-405, 443-452, 495-501, 512-523, 574-583 and 362-375 of SEQ ID NO:221; 5-25, 27-34, 47-59, 64-70, 76-86, 145-158, 166-183, 189-202, 217-231, 235-242, 260-270, 278-309 and 1-102 of SEQ ID NO:222; 4-19, 24-76, 78-83, 90-99, 102-109, 114-122, 137-147, 154-174, 177-188, 203-212, 217-223, 227-239 and 226-325 of SEQ ID NO:223; 7-37, 71-90, 94-109, 117-128, 141-153, 179-192, 199-206, 225-231, 237-243, 258-264 and 40-51 of SEQ ID NO:224; 13-19, 25-30, 46-59, 75-91, 101-107, 114-124, 129-135, 137-145, 160-167, 171-179, 187-194, 209-215, 217-222, 229-239, 243-249, 257-265, 269-275, 299-308, 310-327 and 282-300 of SEQ ID NO:225; 86-100, 216-230, 342-369, 382-388, 424-430, 438-445, 452-458,

488-494, 501-518, 554-560, 568-574, 584-592, 603-609, 611-629, 639-645, 652-661, 669-699, 708-714, 726-738, 747-753, 763-775, 785-791, 794-807, 815-824, 826-845, 854-860, 863-868, 870-883, 892-898, 901-906, 909-921, 930-937, 946-959, 968-974, 977-990, 998-1007, 1009-1027, 1037-1043, 1046-1051, 1053-1066, 1075-1081, 1084-1089, 1092-1103, 1113-1119, 1122-1135, 1143-1152, 1154-1172, 1182-1188, 1191-1196, 1200-1210, 1220-1226, 1229-1235, 1237-1249, 1259-1265, 1268-1281, 1289-1298, 1305-1318, 1328-1334, 1337-1343, 1345-1357, 1367-1373, 1390-1396, 1405-1411, 1418-1423, 1426-1435, 1445-1455, 1474-1483, 1493-1500, 1505-1512, 1517-1524, 1538-1544, 1568-1578, 1595-1601, 1674-1682, 1687-1720, 1728-1736, 1738-1744, 1754-1761, 1764-1774, 1798-1824, 1836-1842, 1886-1893, 1895-1903, 366-781, 782-1518 and 1731-1747 of SEQ ID NO:226; 4-17, 20-39, 46-55, 60-66, 102-110, 114-122, 125-131, 161-167, 172-178, 185-190, 195-202, 218-232, 236-252, 264-291, 293-302, 309-315, 324-339 and 169-381 of SEQ ID NO:227; 5-10, 13-40, 42-53, 69-75, 83-89, 120-135, 150-161, 174-190, 203-225, 229-247, 257-287, 318-348 and 30-200 of SEQ ID NO:228; 7-19, 43-53, 64-72, 124-139, 52-84 and 120-131 of SEQ ID NO:229; 12-19, 39-48, 58-100, 117-123, 154-162, 164-187, 189-195, 202-216, 218-235, 241-246, 262-278, 315-328, 333-347, 354-366, 372-379, 391-405, 422-429, 431-442, 444-450, 458-466, 478-485, 494-501, 504-510, 520-535, 573-580, 589-598, 615-625, 666-676, 686-698, 722-729, 737-746, 756-767, 787-796, 805-816, 824-829, 833-848, 856-864, 866-876, 879-886, 898-904, 918-924, 927-934, 941-960, 967-978 and 561-575 of SEQ ID NO:230; 11-29, 49-55, 70-77, 84-100, 102-112, 148-155, 160-177, 181-204 and 1-104 of SEQ ID NO:231; 27-44, 64-71, 122-133, 151-156, 164-178, 214-220, 226-232, 235-244, 253-262, 282-288, 294-310, 317-325, 350-356, 362-368, 376-383, 438-443, 449-454, 459-464, 492-498, 500-511, 529-535, 538-546, 567-573, 597-603, 660-665, 674-679, 724-734, 763-769, 773-784, 791-801, 807-815, 821-826, 840-848, 863-868, 897-902, 908-928, 932-953, 956-975, 980-987, 990-996, 1012-1018, 1042-1063, 1095-1116, 1149-1157, 1160-1167, 110-357, 358-501 and 502-1161 of SEQ ID NO:232; 4-21, 64-71, 73-84, 128-138, 144-162, 203-217, 240-263, 288-298, 300-308, 310-317, 325-351, 369-380, 391-411 and 330-345 of SEQ ID NO:233; 5-11, 25-31, 39-48, 51-79, 89-98, 100-122, 135-148, 166-201, 203-227, 230-250, 254-260, 266-272, 274-282, 299-305, 328-337 and 31-45 of SEQ ID NO:234; 12-23, 29-48, 51-60, 66-72, 75-81, 83-93, 103-115, 133-148, 168-174, 195-204, 222-229, 231-240, 242-251, 270-280, 286-305, 322-344, 349-360, 364-370, 378-400, 421-441, 448-484, 486-493, 495-501, 504-534, 547-561, 567-590, 597-607, 621-635, 643-649, 658-685, 688-694, 702-711, 717-731, 737-742, 759-765, 767-772, 776-786, 803-809, 815-825, 854-908, 910-919, 923-930, 942-948, 961-975, 994-1014 and 915-

940 of SEQ ID NO:235; 4-9, 32-47, 51-61, 75-96, 139-191 and 1-124 of SEQ ID NO:236; 4-13, 17-38, 43-49, 55-76, 88-95, 110-121, 128-146, 151-157, 162-214, 222-240, 243-249, 251-273, 275-281, 292-298, 300-309, 312-320, 322-331, 355-369, 376-408, 446-460, 471-482, 485-509 and 191-203 of SEQ ID NO:237; 4-21, 72-82, 89-103, 106-115, 118-124, 140-146, 174-184, 191-200, 204-213, 218-224, 261-266, 282-293, 299-309, 311-340, 342-358, 362-372, 381-389, 391-402, 413-421, 438-447, 457-464, 470-478, 501-507, 545-560, 578-624, 631-641, 658-670, 680-689, 717-738, 753-759, 795-805, 816-822, 830-838, 842-848, 869-881, 892-898, 33-51 and 818-835 of SEQ ID NO:238; 4-21, 79-85, 156-177, 183-188, 206-214, 243-249, 261-269, 287-292, 315-322, 334-345, 360-366, 374-390, 402-411, 37-97 and 260-399 of SEQ ID NO:239; 4-9, 19-54, 58-78, 97-104, 111-120, 126-134, 137-145, 163-173, 178-188, 193-203, 211-224, 246-286, 288-324, 337-346, 355-362, 374-390, 392-398, 409-417 and 240-249 of SEQ ID NO:240; 5-12, 14-31, 35-41, 43-61, 82-92, 97-105, 134-145, 155-166, 184-203, 215-223, 225-251, 272-279, 281-306, 310-345, 358-418, 435-473, 482-490, 525-532, 538-547, 549-563, 578-604, 613-639 and 144-154 of SEQ ID NO:241; 53-59, 64-72, 74-100, 133-152, 154-172, 176-181, 207-214, 225-238, 275-297, 304-310, 331-340, 362-367, 384-395, 403-410, 437-443, 448-456, 482-490, 579-597, 602-610, 625-630, 633-651, 699-707, 709-715, 734-743, 750-762 and 544-685 of SEQ ID NO:242; 12-18, 22-40, 45-83, 89-97, 103-109, 147-153, 159-173, 195-204, 210-219, 243-253, 259-265, 273-282, 303-309, 315-325, 332-340, 346-358, 362-367, 377-390, 393-402, 418-426, 447-455, 467-480, 505-512, 514-525, 548-561, 566-576, 584-596, 619-626, 638-645, 649-659, 661-680, 699-708, 714-720, 753-759, 766-772, 775-781, 801-808, 202-218, 282-299, 339-350 and 617-628 of SEQ ID NO:243; 5-33, 52-62, 87-101, 111-135, 137-143, 145-152, 190-202, 209-221, 233-245, 253-270 and 151-215 of SEQ ID NO:244; 19-29, 32-39, 42-48, 75-94, 124-135, 137-145, 152-160, 176-182, 193-203, 215-236, 266-273, 275-291, 297-306, 311-319, 322-342, 348-360, 369-378, 394-401 and 48-64 of SEQ ID NO:245; 4-11, 13-33, 36-43, 53-63, 65-80, 112-129, 134-141, 143-155, 157-168, 178-188, 191-199, 201-207, 215-229, 242-255, 263-270, 283-315, 320-329, 333-338, 340-349, 412-426, 465-478, 485-490, 498-512, 540-554 and 390-516 of SEQ ID NO:246; 4-18, 23-32, 41-47, 54-70, 88-99, 104-111, 118-138, 143-148, 150-162, 168-175, 181-188, 203-211, 214-220, 227-245, 251-268, 275-281, 287-296, 323-333 and 1-90 of SEQ ID NO:247; 8-34, 38-49, 72-83, 85-91, 94-104, 112-125, 134-142, 148-168, 181-189, 191-198, 202-214, 222-233, 242-254, 256-262, 273-278, 287-294, 314-325 and 141-159 of SEQ ID NO:248; 4-24, 30-36, 47-75, 82-105, 124-134, 151-157, 192-202, 208-214, 219-226, 234-247, 285-290, 318-324, 332-340, 343-349, 380-386, 453-462, 472-478, 484-501, 531-

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108, 118-130, 133-147, 152-162, 166-171, 199-204, 211-218, 230-240, 253-261, 274-283, 288-294, 312-317, 325-336, 344-357, 391-414 and 24-146 of SEQ ID NO:275; 26-31, 38-56, 65-82, 90-101, 112-119, 123-153, 175-188, 197-216, 234-242, 249-265, 273-286, 290-305, 327-335, 338-346, 361-372, 394-404 and 290-306 of SEQ ID NO:276; 17-26, 43-48, 50-73, 81-93, 95-107, 139-146, 158-168, 171-176, 190-196, 202-212, 216-223, 243-266, 274-282, 308-313, 324-330, 344-378, 380-387, 403-422, 427-443, 448-455, 457-465, 491-515, 517-528, 553-567, 589-599, 610-617, 642-648, 670-697, 709-717, 726-743, 745-759, 769-803, 807-823, 840-849 and 820-851 of SEQ ID NO:277; 4-18, 39-48, 53-63, 66-90, 102-117, 125-134, 137-145, 156-162, 169-197, 26-40 and 56-80 of SEQ ID NO:278; 21-33, 36-42, 49-60, 68-76, 91-105, 123-130, 141-161, 169-178, 185-190, 192-199, 205-214, 223-233, 239-247, 260-269, 284-293, 300-314, 324-352, 357-364, 373-382, 389-403, 420-432, 438-446, 466-471, 477-484, 503-509, 549-556, 558-576, 600-623, 625-635, 654-661, 663-669, 671-687, 702-716, 735-741, 744-750, 757-766, 776-786, 807-815, 824-832, 854-860, 863-897, 909-915, 920-946, 952-959, 982-997, 1024-1038, 1049-1055, 1071-1085, 1104-1113, 1121-1132, 1138-1150, 1187-1196, 1212-1221, 1227-1236, 1257-1262, 1264-1278, 1282-1294, 1307-1318, 1353-1370, 1382-1388, 1396-1409, 1434-1440, 1446-1454, 1465-1478, 1485-1513, 1516-1529, 1540-1545, 1563-1568, 1575-1593, 1607-1616, 1628-1645, 1648-1661, 1676-1682, 1689-1697, 1713-1719, 1739-1749, 1753-1758, 1763-1774, 1797-1803, 1807-1846, 1855-1874, 1877-1891, 1893-1907, 1912-1925, 1931-1943, 1955-1965, 1976-1990, 2032-2043, 2045-2051, 2099-2105, 2131-2138, 2161-2179, 2188-2199, 2205-2216, 2219-2227, 2235-2245, 2247-2267, 2277-2288, 2294-2304, 2314-2326, 2346-2358, 2365-2377, 2383-2402, 2407-2423, 2437-2450, 2454-2473, 2489-2497, 2525-2531, 2557-2570, 2580-2587, 2589-2599, 2621-2641, 2647-2653, 2661-2677, 2685-2690, 2697-2717, 2722-2733, 2739-2777, 2786-2793, 2801-2808, 2811-2822, 2825-2835, 2838-2845, 2859-2871, 2877-2883, 213-344, 954-1080 and 2524-2733 of SEQ ID NO:279; 10-16, 18-23, 28-41, 63-69, 77-91, 101-109, 118-136, 146-153, 155-162, 168-179, 192-207, 217-226, 229-235, 239-254, 279-286, 294-307, 313-319, 334-341, 344-353, 363-377, 390-396 and 178-328 of SEQ ID NO:280; 18-42, 68-84, 89-95, 100-105, 107-115, 125-135, 154-177, 189-195, 205-228, 236-243, 252-259, 279-300, 309-316, 323-331, 340-351, 353-364, 377-402 and 85-97 of SEQ ID NO:281; 4-18, 26-32, 66-76, 100-126, 151-159, 178-186, 188-194, 200-210, 241-248, 253-259, 262-279, 284-291, 307-313, 315-322, 327-337, 376-386, 399-407, 432-441, 467-473, 487-497, 499-505, 543-549, 560-568, 585-593, 598-604, 608-614, 630-642, 647-653, 690-703, 717-730, 21-200 and 468-480 of SEQ ID NO:282; 17-49, 52-58, 62-73, 78-97, 100-117, 122-172, 185-190, 193-217, 225-236 and

33-42 of SEQ ID NO:283; 7-39, 50-58, 73-89, 96-107, 109-120, 126-142, 152-170, 178-202, 205-211, 224-244, 249-259, 261-270, 300-310, 312-325 and 158-169 of SEQ ID NO:284; 4-31, 40-64, 71-82, 85-92, 102-124, 126-139, 147-152, 159-173, 176-188, 195-207, 210-216, 234-241, 249-256, 258-276, 279-293, 296-302, 310-315, 349-356, 363-378, 380-403, 411-426, 435-441, 448-459, 463-476, 488-494 and 201-221 of SEQ ID NO:285; 5-13, 15-74, 87-104, 107-120, 123-129, 136-145, 150-191, 193-206, 227-248, 250-264, 278-302, 304-323, 332-378, 384-407, 409-419, 425-457, 462-471, 474-497, 511-545, 555-564, 571-578, 585-598, 640-647, 669-675, 682-691, 693-705, 729-743, 752-761, 772-780, 786-804, 808-818, 822-846, 858-880, 884-900, 910-939, 941-947, 962-971, 973-988, 998-1003, 1007-1027 and 236-259 of SEQ ID NO:286; 4-19, 27-68, 81-111, 121-160 and 60-79 of SEQ ID NO:287; 4-37, 40-46, 52-57, 199-205, 222-229, 236-244, 250-267, 269-282 and 27-197 of SEQ ID NO:288; 4-16, 24-30, 32-38, 63-75, 86-92, 98-111, 113-126, 160-165, 170-180, 198-204, 227-233, 239-245, 253-273, 308-314, 352-365, 382-387, 395-403, 423-429, 472-482, 484-493, 501-507, 518-526, 536-541, 543-550, 556-562, 586-600, 626-633, 649-661, 680-688 and 546-559 of SEQ ID NO:289; 16-33, 48-59, 63-71, 77-92, 94-109, 117-124, 139-151, 169-181, 184-227, 233-249, 251-261, 263-275, 282-294, 297-321, 326-332, 341-355, 383-399 and 258-272 of SEQ ID NO:290; 11-26, 31-39, 43-52, 55-62, 64-70, 80-94, 123-133, 135-141, 172-181, 185-206, 209-218, 224-230, 238-244, 251-262, 264-271, 290-301, 306-324, 333-340, 350-357, 367-375, 390-397, 434-441, 443-448, 77-226 and 350-429 of SEQ ID NO:291; 4-13, 22-27, 31-45, 50-59, 72-96, 99-114, 131-141, 143-150, 159-176, 180-186, 189-198, 208-214, 234-253, 271-287, 294-299, 310-366, 382-390, 398-416, 424-443 and 283-305 of SEQ ID NO:292; 9-26, 30-53, 62-72, 86-95, 112-122, 136-145, 153-160, 209-221, 227-237, 241-268, 281-288, 291-298, 308-314, 321-328, 336-346, 351-379, 388-397, 409-416, 423-433, 443-481, 511-519 and 213-232 of SEQ ID NO:293; 12-18, 25-31, 38-50, 59-67, 71-82, 96-126 and 76-88 of SEQ ID NO:294; 4-25, 39-44, 64-71, 74-88, 100-113, 128-138, 151-162, 164-177, 185-190, 204-213, 233-239, 246-254, 281-286, 293-306, 309-318, 333-347, 349-359, 385-398, 404-423, 458-465, 477-484, 490-499, 501-533, 554-566, 582-590, 596-616, 624-629, 631-639, 654-680, 694-720, 735-743 and 2-100 of SEQ ID NO:295; 4-16, 36-41, 52-75, 98-107, 109-117, 122-128, 133-139, 141-155, 159-165, 169-182, 187-193, 195-201, 211-224, 230-236, 247-269, 278-290 and 75-92 of SEQ ID NO:296; 7-21, 25-33, 37-43, 87-94, 103-120, 131-147, 168-174, 197-203, 207-212, 227-237, 247-257, 263-271, 279-287, 298-306, 320-325, 332-340, 363-374, 379-384, 390-401, 403-414, 428-433, 448-457, 462-475, 483-490, 513-519, 525-535, 543-554, 559-566, 571-620, 625-631, 636-642, 659-670, 688-706, 708-723, 770-

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NO:350; 4-17, 35-41, 46-89, 93-98 and 71-89 of SEQ ID NO:351; 4-12, 14-24 and 2-17 of SEQ ID NO:352; 9-17 and 5-16 of SEQ ID NO:353; 7-41, 48-58, 63-75, 80-89 and 43-53 of SEQ ID NO:354; 4-22, 25-30 and 4-14 of SEQ ID NO:355; 4-55 and 18-33 of SEQ ID NO:356; 262-280 of SEQ ID NO:179; 131-146 of SEQ ID NO:186; 207-224 of SEQ ID NO:188; 27-50, 203-217 and 313-325 of SEQ ID NO:189; 110-129 of SEQ ID NO:192; 156-179, 174-197, 192-215, 210-233, 228-251 and 246-267 of SEQ ID NO:190; 377-400 of SEQ ID NO:196; 34-43, 234-257 and 350-367 of SEQ ID NO:203; 304-327 of SEQ ID NO:207; 25-48, 43-66 and 61-82 of SEQ ID NO:222; 398-421, 416-439, 434-457, 452-475, 470-493, 488-511, 506-529, 524-547, 621-644, 639-664, 707-730, 725-748, 743-766, 761-784, 779-802, 797-820, 984-1007, 1002-1025, 1020-1043, 1038-1061, 1056-1079, 1074-1097, 1092-1115, 1286-1309, 1304-1327, 1322-1345, 1340-1363, 1358-1381, 1376-1399, 1394-1417, 1412-1435, 1430-1453, 1448-1471, 1466-1489 and 1484-1507 of SEQ ID NO:226; 188-211, 206-229, 224-247, 242-265, 260-283 and 278-296 of SEQ ID NO:227; 56-79 and 122-132 of SEQ ID NO:229; 35-46 of SEQ ID NO:231; 178-201, 196-219, 214-237, 232-255, 250-273, 268-291, 379-402, 397-420, 415-438, 433-456, 451-474, 642-665, 660-683, 678-701, 696-719, 714-737, 732-755, 750-773, 768-791, 899-922, 917-940, 935-958, 1037-1060, 1055-1078, 1073-1096 and 1091-1114 of SEQ ID NO:232; 330-346 of SEQ ID NO:233; 571-594, 589-612, 607-630, 625-648, 643-666 and 661-684 of SEQ ID NO:242; 188-207 of SEQ ID NO:244; 61-84, 308-331, 326-349, 344-367, 362-385, 380-403 and 398-421 of SEQ ID NO:249; 79-98, 345-366, 844-867, 870-887 and 890-905 of SEQ ID NO:258; 94-109 of SEQ ID NO:268; 188-207 of SEQ ID NO:272; 290-306 of SEQ ID NO:276; 826-849 of SEQ ID NO:277; 228-252, 247-270, 265-288, 283-306, 301-324, 955-978, 973-996, 991-1014, 1009-1032, 1027-1050, 1045-1068, 2533-2556, 2551-2574, 2569-2592, 2587-2610, 2605-2628 and 2623-2646 of SEQ ID NO:279; 86-109 and 104-127 of SEQ ID NO:288; 546-560 of SEQ ID NO:289; 260-271 of SEQ ID NO:290; 106-129, 124-147, 142-165, 160-183, 178-201 and 375-398 of SEQ ID NO:291; 284-307 of SEQ ID NO:292; 362-385 of SEQ ID NO:301.

41. (Previously Presented) The hyperimmune serum-reactive antigen or fragment of claim 38, comprising at least 6 contiguous amino acids of any of SEQ ID NOs: 179-356.

42. (Previously Presented) The hyperimmune serum-reactive antigen or fragment of claim 38, comprising at least 8 contiguous amino acids of any of SEQ ID NOs: 179-356.

43. (Previously Presented) The hyperimmune serum-reactive antigen or fragment of claim 38, comprising at least 10 contiguous amino acids of any of SEQ ID NOs: 179-356.
44. (Previously Presented) The hyperimmune serum-reactive antigen or fragment of claim 38, further defined as directed against *H. pylori*.
45. (Previously Presented) A pharmaceutical composition comprising a hyperimmune serum-reactive antigen or fragment of claim 38.
46. (Previously Presented) The pharmaceutical composition of claim 45, wherein the hyperimmune serum-reactive antigen or fragment is directed against *H. pylori*.
47. (Previously Presented) The pharmaceutical composition of claim 45, further defined as comprising at least two different hyperimmune serum-reactive antigens and/or fragments.
48. (Previously Presented) The pharmaceutical composition of claim 47, wherein the at least two different hyperimmune serum-reactive antigens and/or fragments are both directed against *H. pylori*.
49. (Previously Presented) The pharmaceutical composition of claim 45, further comprising an immunostimulatory substance.
50. (Previously Presented) The pharmaceutical composition of claim 49, wherein the immunostimulatory substance is a polycationic polymer, an immunostimulatory deoxynucleotide (ODN), a peptide containing at least two LysLeuLys motifs, a neuroactive compound, alum, or a Freund's complete or incomplete adjuvant.
51. (Previously Presented) The pharmaceutical composition of claim 50, wherein the polycationic polymer is a polycationic peptide.
52. (Previously Presented) The pharmaceutical composition of claim 50, wherein the neuroactive compound is human growth hormone.
53. (Previously Presented) The pharmaceutical composition of claim 45, further defined as a vaccine.

54. (Previously Presented) The pharmaceutical composition of claim 53, further defined as a vaccine for treatment and/or prevention of *H. pylori* infection.

55. (Withdrawn) A method of vaccinating a subject comprising:

obtaining a pharmaceutical composition of claim 45; and
administering the pharmaceutical composition to a subject;
wherein the subject is vaccinated.

56. (Withdrawn) The method of claim 55, wherein the subject is a human.

57. (Withdrawn) The method of claim 55, further defined as a method of treating and/or preventing *H. pylori* infection in the subject.

58. (Withdrawn) The method of claim 55, wherein the hyperimmune serum-reactive antigen or fragment is directed against *H. pylori*.

59. (Withdrawn) The method of claim 55, wherein the pharmaceutical composition comprises at least two different hyperimmune serum-reactive antigens or fragments thereof.

60. (Withdrawn) The method of claim 59, wherein the at least two different hyperimmune serum-reactive antigens or fragments thereof are both directed against *H. pylori*.